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TECH CENTER 1600/2900

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/610,551B

DATE: 08/05/2003
TIME: 15:39:40

Input Set : **N:\Crf4\08042003\I610551.raw**
Output Set: **N:\CRF4\08052003\I610551B.raw**

SEQUENCE LISTING

```
 1 (1) GENERAL INFORMATION:
 2       (i) APPLICANT: Barbas, Carlos F, III
 3                     Burton, Dennis R
 4                     Lerner, Richard A
 5      (ii) TITLE OF INVENTION: METHODS FOR PRODUCING ANTIBODY LIBRARIES
 6                             USING UNIVERSAL OR RANDOMIZED IMMUNOGLOBULIN LIGHT CHAINS
 7     (iii) NUMBER OF SEQUENCES: 70
 8      (iv) CORRESPONDENCE ADDRESS:
 9           (A) ADDRESSEE: The Scripps Research Institute
10           (B) STREET: 10666 North Torrey Pines Road, TPC8
11           (C) CITY: La Jolla
12           (D) STATE: CA
13           (E) COUNTRY: USA
14           (F) ZIP: 92037
15       (v) COMPUTER READABLE FORM:
16           (A) MEDIUM TYPE: Floppy disk
17           (B) COMPUTER: IBM PC compatible
18           (C) OPERATING SYSTEM: PC-DOS/MS-DOS
19           (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
20      (vi) CURRENT APPLICATION DATA:
```
C--> 21   **(A) APPLICATION NUMBER: US/09/610,551B**
C--> 22   **(B) FILING DATE: 05-Jul-2000**
```
23           (C) CLASSIFICATION:
24     (vii) PRIOR APPLICATION DATA:
```
W--> 25   **(A) APPLICATION NUMBER: US 07/826,623**
```
26           (B) FILING DATE: 27-JAN-1992
```
W--> 27   **(A) APPLICATION NUMBER: US 08/174,674**
```
28           (B) FILING DATE: 28-DEC-1993
```
W--> 29   **(A) APPLICATION NUMBER: US 08/300,386**
```
30           (B) FILING DATE: 02-SEP-1994
```
W--> 31   **(A) APPLICATION NUMBER: US 08/931,645**
```
32           (B) FILING DATE: 16-SEP-1997
33    (viii) ATTORNEY/AGENT INFORMATION:
34           (A) NAME: Fitting, Thomas
35           (B) REGISTRATION NUMBER: 34,163
36           (C) REFERENCE/DOCKET NUMBER: TSRI 409.1
37      (ix) TELECOMMUNICATION INFORMATION:
38           (A) TELEPHONE: 858-554-2937
39           (B) TELEFAX: 858-554-6312
40 (2) INFORMATION FOR SEQ ID NO: 1:
41       (i) SEQUENCE CHARACTERISTICS:
42           (A) LENGTH: 687 base pairs
```

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```
43              (B) TYPE: nucleic acid
44              (C) STRANDEDNESS: single
45              (D) TOPOLOGY: linear
46        (ii) MOLECULE TYPE: cDNA
47       (iii) HYPOTHETICAL: NO
48        (iv) ANTI-SENSE: NO
49        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
50        CTCGAGCAGT CTGGGGCTGA GGTGAAGAAG CCTGGGTCCT CGGTGAAGGT CTCCTGCAGG        60
51        GCTTCTGGAG GCACCTTCAA CAATTATGCC ATCAGCTGGG TGCGACAGGC CCCTGGACAA       120
52        GGGCTTGAGT GGATGGGAGG GATCTTCCCT TTCCGTAATA CAGCAAAGTA CGCACAACAC       180
53        TTCCAGGGCA GAGTCACCAT TACCGCGGAC GAATCCACGG GCACAGCCTA CATGGAGCTG       240
54        AGCAGCCTGA GATCTGAGGA CACGGCCATA TATTATTGTG CGAGAGGGGA TACGATTTTT       300
55        GGAGTGACCA TGGGATACTA CGCTATGGAC GTCTGGGGCC AAGGGACCAC GGTCACCGTC       360
56        TCCGCAGCCT CCACCAAGGG CCCATCGGTC TTCCCCCTGG CACCCTCCTC CAAGAGCACC       420
57        TCTGGGGGCA CAGCGGCCCT GGGCTGCCTG GTCAAGGACT ACTTCCCCGA ACCGGTGACG       480
58        GTGTCGTGGA ACTCAGGCGC CCTGACCAGC GGCGTGCACA CCTTCCCGGC TGTCCTACAG       540
59        TCCTCAGGAC TCTACTCCCT CAGCAGCGTG GTGACCGTGC CCTCCAGCAG CTTGGGCACC       600
60        CAGACCTACA TCTGCAACGT GAATCACAAG CCCAGCAACA CCAAGGTGGA CAAGAAAGCA       660
61        GAGCCCAAAT CTTGTGACAA AACTAGT                                          687
63    (2) INFORMATION FOR SEQ ID NO: 2:
64        (i) SEQUENCE CHARACTERISTICS:
65             (A) LENGTH: 646 base pairs
66             (B) TYPE: nucleic acid
67             (C) STRANDEDNESS: single
68             (D) TOPOLOGY: linear
69        (ii) MOLECULE TYPE: cDNA
70       (iii) HYPOTHETICAL: NO
71        (iv) ANTI-SENSE: NO
72        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
73        GAGCTCACGC AGTCTCCAGG CACCCTGTCT TTGTCTCCAG GGGAAAGAGC CACCCTCTCC        60
74        TGCAGGGCCA GTCACAGTGT TAGCAGGGCC TACTTAGCCT GGTACCAGCA GAAACCTGGC       120
75        CAGGCTCCCA GGCTCCTCAT CTATGGTACA TCCAGCAGGG CCACTGGCAT CCCAGACAGG       180
76        TCCAGTGGCA GTGGGTCTGG GACAGACTTC ACTCTCACCA TCAGCAGACT GGAGCCTGAA       240
77        GATTTTGCAG TGTACTACTG TCAGCAGTAT GGTGGCTCAC CGTGGTTCGG CCAAGGGACC       300
78        AAGGTGGAAC TCAAACGAAC TGTGGCTGCA CCATCTGTCT TCATCTTCCC GCCATCTGAT       360
79        GAGCAGTTGA AATCTGGAAC TGCCTCTGTT GTGTGCCTGC TGAATAACTT CTATCCCAGA       420
80        GAGGCCAAAG TACAGTGGAA GGTGGATAAC GCCCTCCAAT CGGGTAACTC CAGGAGAGT        480
81        GTCACAGAGC AGGACAGCAA GGACAGCACC TACAGCCTCA GCAGCACCCT GACGCTGAGC       540
82        AAAGCAGACT ACGAGAAACA CAAAGTCTAC GCCTGCGAAG TCACCCATCA GGGCCTGAGT       600
83        TCGCCCGTCA CAAAGAGCTT CAACAGGGGA GAGTGTTAAT CTAGA                      646
85    (2) INFORMATION FOR SEQ ID NO: 3:
86        (i) SEQUENCE CHARACTERISTICS:
87             (A) LENGTH: 21 base pairs
88             (B) TYPE: nucleic acid
89             (C) STRANDEDNESS: single
90             (D) TOPOLOGY: linear
91        (ii) MOLECULE TYPE: cDNA
92       (iii) HYPOTHETICAL: NO
93        (iv) ANTI-SENSE: NO
```

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```
94      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
95       GAATTCTAAA CTAGCTAGTC G                                    21
97 (2) INFORMATION FOR SEQ ID NO: 4:
98       (i) SEQUENCE CHARACTERISTICS:
99           (A) LENGTH: 21 base pairs
100             (B) TYPE: nucleic acid
101             (C) STRANDEDNESS: single
102             (D) TOPOLOGY: linear
103      (ii) MOLECULE TYPE: cDNA
104     (iii) HYPOTHETICAL: NO
105      (iv) ANTI-SENSE: YES
106      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
107      ATACTGCTGA CAGTAATACA C                                    21
109 (2) INFORMATION FOR SEQ ID NO: 5:
110      (i) SEQUENCE CHARACTERISTICS:
111          (A) LENGTH: 57 base pairs
112             (B) TYPE: nucleic acid
113             (C) STRANDEDNESS: single
114             (D) TOPOLOGY: linear
115      (ii) MOLECULE TYPE: cDNA
116     (iii) HYPOTHETICAL: NO
117      (iv) ANTI-SENSE: NO
118      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
119      TATTACTGTC AGCAGTATNN KNNKNNKNNK ACTTTCGGCG GAGGGACCAA GGTGGAG    57
121 (2) INFORMATION FOR SEQ ID NO: 6:
122      (i) SEQUENCE CHARACTERISTICS:
123          (A) LENGTH: 21 base pairs
124             (B) TYPE: nucleic acid
125             (C) STRANDEDNESS: single
126             (D) TOPOLOGY: linear
127      (ii) MOLECULE TYPE: cDNA
128     (iii) HYPOTHETICAL: NO
129      (iv) ANTI-SENSE: YES
130      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
131      AATACGACTC ACTATAGGGC G                                    21
133 (2) INFORMATION FOR SEQ ID NO: 7:
134      (i) SEQUENCE CHARACTERISTICS:
135          (A) LENGTH: 48 base pairs
136             (B) TYPE: nucleic acid
137             (C) STRANDEDNESS: single
138             (D) TOPOLOGY: linear
139      (ii) MOLECULE TYPE: cDNA
140     (iii) HYPOTHETICAL: NO
141      (iv) ANTI-SENSE: NO
142      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
143      TATTACTGTC AGCAGTATNN KNNKNNKNNK ACTTTCGGCG GAGGGACC        48
145 (2) INFORMATION FOR SEQ ID NO: 8:
146      (i) SEQUENCE CHARACTERISTICS:
147          (A) LENGTH: 60 base pairs
```

```
148             (B) TYPE: nucleic acid
149             (C) STRANDEDNESS: single
150             (D) TOPOLOGY: linear
151        (ii) MOLECULE TYPE: cDNA
152       (iii) HYPOTHETICAL: NO
153        (iv) ANTI-SENSE: NO
154        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
155         TATTACTGTC AGCAGTATNN KNNKNNKNNK NNKACTTTCG GCGGAGGGAC CAAGGTGGAG        60
157 (2) INFORMATION FOR SEQ ID NO: 9:
158        (i) SEQUENCE CHARACTERISTICS:
159             (A) LENGTH: 51 base pairs
160             (B) TYPE: nucleic acid
161             (C) STRANDEDNESS: single
162             (D) TOPOLOGY: linear
163        (ii) MOLECULE TYPE: cDNA
164       (iii) HYPOTHETICAL: NO
165        (iv) ANTI-SENSE: NO
166        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
167         TATTACTGTC AGCAGTATNN KNNKNNKNNK NNKACTTTCG GCGGAGGGAC C                 51
169 (2) INFORMATION FOR SEQ ID NO: 10:
170        (i) SEQUENCE CHARACTERISTICS:
171             (A) LENGTH: 75 base pairs
172             (B) TYPE: nucleic acid
173             (C) STRANDEDNESS: single
174             (D) TOPOLOGY: linear
175        (ii) MOLECULE TYPE: cDNA
176       (iii) HYPOTHETICAL: NO
177        (iv) ANTI-SENSE: NO
178        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
179         GATTTTGCAG TGTATTACTG TCAGCAGTAT NNKNNKNNKN NKNNKNNKAC TTTCGGCGGA        60
180         GGGACCAAGG TGGAG                                                        75
182 (2) INFORMATION FOR SEQ ID NO: 11:
183        (i) SEQUENCE CHARACTERISTICS:
184             (A) LENGTH: 54 base pairs
185             (B) TYPE: nucleic acid
186             (C) STRANDEDNESS: single
187             (D) TOPOLOGY: linear
188        (ii) MOLECULE TYPE: cDNA
189       (iii) HYPOTHETICAL: NO
190        (iv) ANTI-SENSE: NO
191        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
192         TATTACTGTC AGCAGTATNN KNNKNNKNNK NNKNNKACTT TCGGCGGAGG GACC             54
194 (2) INFORMATION FOR SEQ ID NO: 12:
195        (i) SEQUENCE CHARACTERISTICS:
196             (A) LENGTH: 75 base pairs
197             (B) TYPE: nucleic acid
198             (C) STRANDEDNESS: single
199             (D) TOPOLOGY: linear
200        (ii) MOLECULE TYPE: cDNA
```

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```
201    (iii) HYPOTHETICAL: NO
202     (iv) ANTI-SENSE: NO
203     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
204     GATTTTGCAG TGTATTACTG TNNKNNKNNK NNKNNKNNKN NKNNKNNKNN KTTCGGCGGA     60
205     GGGACCAAGG TGGAG                                                      75
207 (2) INFORMATION FOR SEQ ID NO: 13:
208     (i) SEQUENCE CHARACTERISTICS:
209         (A) LENGTH: 70 base pairs
210         (B) TYPE: nucleic acid
211         (C) STRANDEDNESS: single
212         (D) TOPOLOGY: linear
213    (ii) MOLECULE TYPE: cDNA
214   (iii) HYPOTHETICAL: NO
215    (iv) ANTI-SENSE: YES
216    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
217    GTTCCACCTT GGTCCCTTGG CCGAAMNNMN NMNNMNNMNN MNNMNNMNNA CAGTAGTACA     60
218    CTGCAAAATC                                                           70
220 (2) INFORMATION FOR SEQ ID NO: 14:
221     (i) SEQUENCE CHARACTERISTICS:
222         (A) LENGTH: 76 base pairs
223         (B) TYPE: nucleic acid
224         (C) STRANDEDNESS: single
225         (D) TOPOLOGY: linear
226    (ii) MOLECULE TYPE: cDNA
227   (iii) HYPOTHETICAL: NO
228    (iv) ANTI-SENSE: YES
229    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
230    GTTCCACCTT GGTCCCTTGG CCGAAMNNMN NMNNMNNMNN MNNMNNMNNM NNMNNACAGT     60
231    AGTACACTGC AAAATC                                                     76
233 (2) INFORMATION FOR SEQ ID NO: 15:
234     (i) SEQUENCE CHARACTERISTICS:
235         (A) LENGTH: 94 base pairs
236         (B) TYPE: nucleic acid
237         (C) STRANDEDNESS: single
238         (D) TOPOLOGY: linear
239    (ii) MOLECULE TYPE: cDNA
240   (iii) HYPOTHETICAL: NO
241    (iv) ANTI-SENSE: YES
242    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
243    GTTCCACCTT GGTCCCTTGG CCGAAMNNMN NMNNMNNMNN MNNMNNMNNM NNMNNMNNMN     60
244    NMNNMNNMNN MNNACAGTAG TACACTGCAA AATC                                 94
246 (2) INFORMATION FOR SEQ ID NO: 16:
247     (i) SEQUENCE CHARACTERISTICS:
248         (A) LENGTH: 25 base pairs
249         (B) TYPE: nucleic acid
250         (C) STRANDEDNESS: single
251         (D) TOPOLOGY: linear
252    (ii) MOLECULE TYPE: cDNA
253   (iii) HYPOTHETICAL: NO
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/05/2003
PATENT APPLICATION: US/09/610,551B   TIME: 15:39:16

Input Set : N:\Crf4\08042003\I610551.raw
Output Set: N:\CRF4\08052003\I610551B.raw

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 6

VERIFICATION SUMMARY   DATE: 08/05/2003
PATENT APPLICATION: **US/09/610,551B**   TIME: 15:39:16

Input Set : **N:\Crf4\08042003\I610551.raw**
Output Set: **N:\CRF4\08052003\I610551B.raw**

L:21 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:22 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:27 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vii)
L:29 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vii)
L:31 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vii)